

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

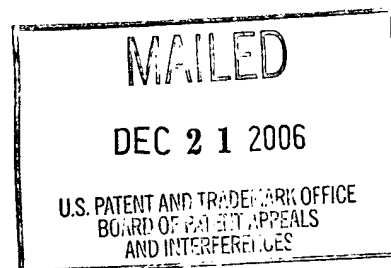
UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte AMY E. BAKER

Appeal No. 2006-2477
Application No. 09/557,187

ON BRIEF



Before MILLS, LINCK, and LEBOVITZ, Administrative Patent Judges.

LEBOVITZ, Administrative Patent Judge.

DECISION ON APPEAL

This appeal involves claims to a fine mist pump spray containing a solution of salicylic acid. The Examiner has rejected the claims as obvious over prior art. We have jurisdiction under 35 U.S.C. § 134. We affirm.

Background

The application describes topical compositions containing salicylic acid which can be sprayed on to the skin to treat acne or acneform conditions. Specification, page 1, lines 2-4. The pH of the composition is chosen to reduce the likelihood that the spray will cause irritation to the nasal passages or elicit coughing. Id., page 2, lines 15-16;

pages 6-7. The composition can be contained in a fine mist pump spray dispenser to facilitate the delivery of a fine mist spray to the skin region requiring treatment. Id., page 2, lines 17-21.

Claim 1, 2, 4, 5, 7-11, 13, and 15-22 are on appeal. The claims are subject to four different prior art rejections, each rejection covering a different grouping of claims. Brief, page 4. Within each grouping, the claims stand or fall together because Appellant did not provide separate reasons for patentability for any of the individual claims.

Obviousness under 35 U.S.C § 103

Claim construction

The first step in an obviousness analysis is to determine the meaning and scope of each claim. Amazon.com, Inc. v. Barnes and noble.com, Inc., 239 F.3d 1343, 1351, 57 USPQ2d 1747, 1752 (Fed. Cir. 2001). "Only when a claim is properly understood can a determination be made whether the claim . . . renders obvious the claimed invention." Id. For this reason, we begin with claim construction.

We select claims 1 and 11 as representative:

1. A fine mist pump spray containing no propellant and adapted only for administration to non-facial body skin to treat acne or acne form conditions thereon, the fine mist spray comprising a solution of salicylic acid, wherein the salicylic acid constitutes from about 0.01% to about 20% by weight of the solution and the pH of the solution is above about 5, whereby any nasal irritation or coughing caused by the fine mist spray is thereby reduced.

11. An article of manufacture for producing the fine mist spray of claim 1 comprising a solution of salicylic acid wherein the salicylic acid constitutes about 0.01% to 20% by weight of the solution and no propellant contained within a fine mist pump spray dispenser, and wherein the solution has a pH above about 5, and whereby any nasal irritation or coughing caused by the fine mist spray is thereby reduced.

Claim 1 is directed to a “fine mist pump spray” which contains a solution of (1) salicylic acid in a concentration “from about 0.01% to about 20%” by weight; and (2) which has a pH of “about above 5.” Nasal irritation or coughing caused by the fine mist spray is reduced by having the solution pH “about above 5.” The “fine mist spray” is “adapted only for administration to non-facial body skin.” Claim 11 is dependent on claim 1, but is directed to an “article of manufacture” for producing the fine mist spray.

The fine mist spray is required by the claim preamble to be “adapted only for administration to non-facial body skin.” Claim 1 is directed to the mist spray, itself; claim 11 is directed to the device which emits the spray. The body of claim 1 does not expressly recite any structural features associated with the adaptation. Furthermore, the specification does not define its meaning. Thus, we rely on the ordinary and conventional meaning of the claim terms to reach a proper construction. The term “adapted” in the context of the claim is understood to mean “suitable,”¹ i.e., suitable for application to non-facial skin. The spray is suitable “only” for application to the non-facial skin. “Only” means “no other.”² This gives two possible constructions to the claim preamble. In one interpretation, the adaptation would make the spray suitable for application to non-facial skin, and no other skin surface. The second interpretation is that the adaptation is for no other purpose than for making the spray suitable for application to the non-facial skin. However, when adapted only for application to non-facial skin, it could also be capable of being applied to other skin regions.

¹ The Random House College Dictionary, Random House, Inc., 1975, page 15.

² Id., page 929.

During prosecution, we are required to give claims their broadest reasonable interpretation consistent with the specification. See e.g., Exxon Res. Eng. Co. v. U.S., 265 F.3d 1371, 1379-80, 60 USPQ2d 1272, 1280 (Fed. Cir. 2001). The first construction requires that the spray be only suitable for non-facial skin, but not for other skin surfaces. We do not view this narrow reading to be reasonable. It is not clear from the specification what characteristics would restrict a spray mist from being applied to facial skin, or make it unsuitable for facial skin regions. The specification states that a spray “intended primarily for application to non-facial portions of the body . . . is preferably one that can be operated right-side up, upside down or any position therebetween,” but this arrangement would not preclude its use for facial skin and does not limit the characteristics of the spray mist, itself. Specification, page 8, lines 10-12. Accordingly, we find that the second construction (adapted only for application to non-facial skin, but capable of being applied to other skin regions) is more reasonable and consistent with the specification because it requires the spray mist and dispenser to have been specially tailored for delivery to non-facial skin, but does not preclude its application to other skin surfaces. Thus, we adopt this construction for the purpose of deciding the obviousness issues in this appeal.

Kozak in view of Briggs and Stone

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 15-17, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kozak³ in view of Briggs⁴ and Stone.⁵

³ Kozak, English translation of DE 3,127,590, published Dec. 12, 1982

⁴ Briggs et al. (Briggs), U.S. Pat. No. 5,976,521, issued Nov. 2, 1999

⁵ Stone, U.S. Pat. No. 4,322,020, issued Mar. 30, 1982

Kozak describes compositions for topical treatment of skin disorders, including acne. Kozak, page 3. The compositions contain salicylic acid, hydroquinone, resorcinol, benzoic acid, phosphoric acid, and β -naphthol. Id., page 2, Abstract. The salicylic acid is present in an amount of 0.02-6 gm in 100 ml of vehicle (which is 0.02-6% salicylic acid). Ethanol can be used as a solvent. Id., page 5. The composition can be administered as a lotion, milk, cream, ointment, or spray. Id., page 2, claim 1.

Anti-acne compositions are described in Briggs. The compositions are water-in-oil emulsions that contain an anti-acne active, such as salicylic acid. Briggs, column 2, lines 53-60. The salicylic acid can be present in an amount of from about 0.1% to about 10% by weight of composition. Id., column 2, lines 61-67. It is dissolved in a mixture of water and alcohol as an "aqueous/alcoholic solution." Id., column 2, lines 29-33; column 3, line 55-column 4, line 9. The pH of the composition is disclosed to be "preferably in the range of about 1 to about 7." Id., column 3, lines 41-45.

A pump sprayer is described in the Stone patent. It can be used to dispense cosmetics and pharmaceuticals in a fine mist spray. Stone, column 1, lines 13-17. The orifice size of the container can be adjusted to vary the size of the particles comprising the mist. Id., column 5, lines 35-48.

According to the Examiner, it would have been obvious to one of ordinary skill in the art to have adjusted Kozak's salicylic acid composition to a pH of "above about 5" in view of Briggs' teaching of salicylic acid compositions having a pH of about 1 to about 7. Answer, page 5. The Examiner asserts that "[w]here the general conditions are disclosed in the prior art, it is within routine skill of the art to determine the optimal range." Id., pages 5-6. The Examiner also argues that the claim limitation "adapted

only for administration to non-facial body skin” is an intended use of the claimed fine mist pump spray.

An intended use of a claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.

Id., page 9.

Appellant argues that prima facie obviousness has not been established. She challenges the Examiner’s interpretation of the pH ranges disclosed in Briggs. Brief, page 15, (b). In her view, Brigg’s disclosure of “from about 1 to about 7” is a composite range for all anti-acne ingredients (“actives”) described in the patent, but is not the range which is specifically applicable to salicylic acid solutions. To determine the particular pH range for salicylic acid, Appellant urges that Briggs teaches that its pK_a must be considered.

Briggs goes on to teach that for each anti-acne active, including salicylic acid, the pH of the solution will be less than about 1 + the pK_a of the anti-active ingredient. One of skill in the art, reading Briggs, would understand that Briggs teaches a solution of salicylic acid having a pH less than about 4 (applying the commonly accepted pK_a for salicylic acid).

Id., page 14, ii.

Appellant also contends that the Examiner improperly ignores the limitation in the claim preamble that the fine mist spray pump be “adapted only for administration to non-facial body skin.” Id., page 10, i. She states that the preamble was intended to limit the claim to a pump “only for administration to non-facial body skin” and that it invoked structural limitations not disclosed in the cited prior art. Id., page 11, (b).

Finally, Appellant argues that the Examiner fails to establish that the combination of references teaches a fine mist spray where “any nasal irritation or coughing caused by the fine mist spray is thereby reduced.” Id., pages 16-17. She asserts that the Examiner states that this limitation is inherent, but had failed to provide evidence to substantiate this position. Id., page 18.

We agree with the Examiner that Briggs’ teaches a salicylic acid solution have a pH in the range of about 1-7. The first step in determining obviousness under 35 U.S.C. § 103, is to consider “the scope and contents of the prior art” in the context of the level of the person of ordinary skill in the art. Graham v. John Deere Co., 383 U.S. 1, 13-14 (1966). Like Briggs, the prior art Lin patent also discloses that salicylic acid compositions have a pH which is less than about 7. Lin, column 4, lines 13-17. To enhance its penetration into the skin, Lin teaches that salicylic acid formations are preferably acidic, i.e., below pH 7. Id., column 4, lines 2-5. This is consistent with Appellant’s own application in which she admits that salicylic acid solutions having pHs above 4 were described in the prior art, including a solution with a pH of 6.5. Specification, page 1, line 23-page 2, line 2; page 6, lines 19-24. Knowing that the prior art teaches pH ranges above 4, it is our view that the person of ordinary skill in the art reading the Briggs patent would not reasonably have considered its disclosure to limit salicylic acid solutions to a pH below 4 as urged by Appellant.

In making her argument that the prior art does not teach or suggest a solution of salicylic acid having a pH above about 5 (Brief, pages 14-16, ii), Appellant relies on the following disclosures in Briggs:

1. "The final aqueous/alcoholic anti-acne active solution preferably has a pH at ambient temperature (25°C) of less than about $pK_a + 1$, where pK_a is the logarithmic acidity constant for the fully protonated anti-acne active." Id., column 3, lines 7-12.

2. "The pH of the final aqueous/alcoholic anti-acne active solution is preferably in the range of from about 1 to about 7, more preferably from about 2 to about 5, especially from about 2 to about 4." Id., column 3, lines 41-44.

According to Appellant, Briggs' later statement (2) that the pH of the anti-acne composition is "preferably in the range of about 1 to about 7" (column 3, lines 41-44) refers to all actives described in the Briggs patent, but for each individual active (i.e., salicylic acid), the pK_a determines its pH range (column 3, lines 7-12). She states that the pK_a for salicylic acid is 2.98. Brief, page 16, (c). When this formula is applied to salicylic acid, Appellant concludes that its pH would be less than 4, which is lower than the pH recited in the claims. Id.

Appellant's argument requires that the pK_a of salicylic acid in Briggs' anti-acne active solution be 2.98. However, there is evidence in the record indicating that this value is not correct. The Lin⁶ patent, cited in a rejection of dependent claims 9 and 18, states:

The following pK_a values have been reported for salicylic acid: 2.98 (H₂O) and 7.9 (ethanol). . . . Without being bound by theory, in mixed alcohol water systems, it is believed that the Pk_a [sic] value for salicylic acid would, in most cases fall between these extremes. An acid formulation range is preferred for salicylic acid compositions in order to suppress ionization and enhance its penetration into the skin.

Lin, column 3, line 61-column 4, line 4.

⁶ Spencer Guang Lin et al. (Lin), U.S. Pat. No. 5,612,324, issued Mar. 18, 1997

The pK_a described by Appellant is for water. However, the salicylic acid composition in the Briggs patent is a mixture of water and alcohol. Briggs, Abstract ("aqueous/alcoholic solution"); column 3, lines 5-7. Lin teaches that the pK_a for salicylic acid in a solution of water and alcohol would be between about its pK_a in water (i.e., 2.98) and its pK_a in alcohol (i.e., 7.9). Were we to adopt Appellant's view that Briggs' salicylic acid composition is preferably adjusted to a pH which is less than about its $pK_a + 1$, this would mean a pH less than between about 4 ($2.98 + 1$) and 8.9 ($7.9 + 1$). The upper limit of the final aqueous/alcohol solution would not be less than pH 4, but would necessarily be above pH 4, and possibly as high as pH 8.9, because of the presence of the alcohol. Taking these facts into account, we conclude that Appellant's argument that the pH of Briggs' salicylic acid solution be below 4 is not correct.

In sum, we agree with the Examiner that Briggs (as well as Lin and other prior art disclosed in Appellant's application) teaches a salicylic acid composition of a pH less than about 7 which overlaps with the claimed range of "above about 5." "A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap with the ranges disclosed in the prior art." In re Peterson, 315 F.3d 1325, 1329, 65 USPQ2d 1379 (Fed. Cir. 2003). We find this to be the case here. Having shown the existence of overlapping ranges, the Examiner properly shifts the burden to Appellant to show that her invention would not have been obvious.

The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. These cases have consistently held that in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range.

In re Woodruff, 919 F.2d 1575, 1578, 16 USPQd 1934, 1936-37 (Fed. Cir 1990).

(Internal citations omitted.) Thus, we look for evidence that the pH range required by the claims has unexpected results when compared to the prior art range.

“[I]t is well settled that unexpected results must be established by factual evidence. ‘Mere argument or conclusory statements in the specification does not suffice.’ “ In re Geisler, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997). (internal citations omitted.) We have “broad discretion as to the weight to give declarations offered in the course of prosecution.” In re American Academy of Science Tech Center, 367 F.3d 1359, 70 USPQ2d 1827 (Fed. Cir. 2004).

A declaration was provided during prosecution stating that it was “not obvious” that the “pH of her [Appellant’s] initial formulation was causing such irritation and coughing or that increasing the pH of the formulation -- as Ms. Baker ultimately did -- would significantly reduce these symptoms.” Declaration of Dr. Maibach, page 2, 5b. However, the declarant did not provide any facts to explain how he arrived at this conclusion. We find this information necessary to properly weigh the evidence. For example, he does not state the initial pH of Appellant’s formulation, the pH at which the irritation/coughing was significantly reduced, or how these measurements were made. The claims require that the irritation and coughing be reduced at a pH of “above about 5,” but Maibach did not state in his declaration that this was the pH at which the symptoms were reduced. Without knowing the facts upon which he derived his opinion, we do not consider Dr. Maibach’s declaration adequate to rebut the case of prima facie obviousness.

The information in the specification is also insufficient to establish unexpected results. Example 2 describes an experiment in which the effect of pH on coughing was examined. Specification, page 11. Healthy volunteers were challenged with salicylic acid spray formulations at pHs of 7, 6, 5.09, 4.06, 3 and 2.6. Id. It was concluded that the “incidence of irritation/coughing began at pHs in the range of 5-6.” Id. As we understand it, nasal irritation or coughing was observed at a pH of 5.09 and 6, but not at the neutral pH 7. The claim requires that “any nasal irritation or coughing caused by the fine mist pray is thereby reduced” at a pH “above about 5.” Symptoms occurred at a pH of 5 and 6 in Example 2, but it is not stated that their incidence was reduced as compared to pH 4.06 and as would be required by claim 1.

For the foregoing reasons, we conclude that Appellant has not rebutted the prima facie obviousness of the claimed subject matter.

Appellant also asserts that the Examiner improperly ignores the preamble limitation that required the claimed fine mist pump spray be “adapted only for administration to non-facial body skin.” Brief, page 10, a. The limitation, she argued, “contains structural limitations.” Id., page 12, (c).

Preamble language that merely states the purpose or intended use of the claimed subject matter is generally not treated as limiting the scope of the claim. E.g., Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp., 320 F.3d 1339, 1345, 65 USPQ2d 1961, 1964-65 (Fed. Cir. 2003); Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997). Terms appearing in a preamble, however, may be considered claim limitations when they recite a structure that is important to the

invention or necessary to give meaning to the claim. E.g., NTP, Inc. v. Research In Motion, Ltd., 418 F.3d 1282, 1305-06, 75 USPQ2d 1763, 1781 (Fed. Cir. 2005).

The preamble requires that the spray and spray device be “adapted only for administration to non-facial body skin.” This phrase clearly refers to an intended use for application of the salicylic acid composition to non-facial skin. However, Appellant urges that it has another purpose in defining necessary structural limitations to the device which would distinguish it from devices utilized to deliver a mist spray to the face. Brief, page 13, (d). These features, Appellant argues, include: 1) spray focused on a small target skin area; 2) spray amount; 3) nozzle shape; and 4) spray pattern. Id.

The claim does not specifically recite what structures are necessary to achieve the “adapted only for” purpose. It is a functional limitation. Giving this functional limitation appropriate weight, the underlying issue with respect to the obviousness rejection is how it distinguishes the claimed invention from the pump sprayer described by Stone. We have carefully reviewed Appellant’s Brief and cannot find a statement explaining why Stone’s dispenser does not meet the claim limitation that it be “adapted only for administration to non-facial body skin.” We understand, as Appellant explains, that the spray nozzle, and other spray dispenser features, would determine the characteristics of the mist expelled from it, but this does not define the particular nozzle shape or size required by the claims or tell us what the mist is required to look like.

In arguing the significance of the claim preamble, Appellant cites case law for the principle that relying on a claim preamble during prosecution “transforms” it into a claim limitation. See Brief, pages 11-12, (b). However, this is an improper standard for construing claims during patent prosecution. The Board’s mandate is to give claims

their broadest reasonable interpretation that is consistent with the specification. See, e.g., In re Morris, 127 F.3d 1048, 1054-1055, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). “[D]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in that way can uncertainties of claim construction be removed, as much as possible, during the administrative process.” In re Zletz, 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The “mode of claim interpretation that is used by the courts in litigation, when interpreting the claims of issued patents in connection with determination of infringement or validity” is not applicable “during prosecution of a pending application before the PTO.” Id., at 321, 13 USPQ2d at 1321-22.

The Examiner is also faulted by Appellant for failing to establish that the recited phrase “any nasal irritation or coughing caused by the fine mist spray is thereby reduced” is an inherent property of a salicylic composition having the claimed properties. Brief, pages 16-17. However, we fail to see a deficiency in the Examiner’s argument. The composition rendered obvious by Kozak and Briggs meets every limitation of the claimed subject matter. A composition having its identical physical features (i.e., salicylic acid concentration and pH) would be reasonably expected by the skilled worker to possess all its properties, including being a non-irritant. This is the “basis in fact and/or technical reasoning” that supports the Examiner’s determination. Id., page 17. “The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for

patentability when the differences would otherwise be obvious.” Ex parte Obiaya, 227 USPQ 58, 60 (BPAI 1985), *aff’d*.mem., 795 F.2d 1017 (Fed. Cir. 1986). The extrinsic evidence cited by the Examiner in support of this (Boettcher) is unnecessary to reach this conclusion, and accordingly, we have not given it consideration. Brief, page 17.

Having established a prima facie case, the burden properly shifted to Appellant “to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product.” In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980); In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977). Appellant did not rebut the Examiner’s determination that composition arrived at by modifying Kozak with Briggs would have the inherent properties recited in the claims.

Finally, Appellant argues that the “combination of Briggs’s multiple-phase emulsion with Kozak and Stone would be not expected to succeed” because the skilled worker “would not expect that the ‘thick’ (high viscosity) solutions that Briggs’s teaches would be capable of forming a fine mist” using Stone’s pump spray. Brief, page 21. This argument is misguided. Briggs is relied upon in the rejection for its teaching of pH, not the solution, itself. Appellant did not identify disclosure in Briggs that would confine its pH teachings to the water-in-oil-emulsion.

For the reasons discussed above, we affirm the rejection of claim 1. Claims 2, 4, 5, 7, 8, 10, 11, 13, 15-17, and 20 fall with claim 1 because they were not separately argued.

Lin

Claims 9 and 19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kozak in view of Briggs and Stone as applied to claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 15-17, and 20, and further in view of Lin.

Claim 9 and 19 require that the alcohol solvent be “denatured ethyl alcohol.” Lin describes an anti-acne composition containing 0.01% to about 20% salicylic acid in a pharmaceutical carrier. Lin, column 2, lines 45-55. Ethanol is listed a preferred carrier. Id., column 4, line 65. Examples I-VII each use denatured ethyl alcohol (“Ethanol (SD 40B Alcohol)”). Id., columns 9-11. Briggs requires the presence of alcohol in its stable salicylic acid composition. Briggs, column 2, lines 29-31 of the “Summary of the Invention.” Ethanol is specifically disclosed and utilized in examples. Id., column 3, line 4; column 11, line 36. According to the Examiner, denatured ethyl alcohol “would have been understood to be interchangeable with the teachings of alcohol and ethanol of Briggs et al.” Answer, page 15.

We find the Examiner’s reasoning to be persuasive. Evidence of a motivation to combine prior art references “may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved.” Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1125, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000). Kozak, Briggs and Lin each individually teach that ethanol is a component of a salicylic acid composition, motivating the skilled worker to have utilized it when producing such a composition. Denatured ethyl alcohol is actually used by Lin in its examples, providing both motivation and expectation of success that it could be used in combination with salicylic

acid. Appellant points to deficiencies in Lin with respect to the mist pump spray, pH, and nasal irritation, but the reference was not cited for these disclosures. Brief, pages 22-23. Thus, we do not find Appellant's position convincing. Accordingly, the rejection of claims 9 and 19 is affirmed

Fitzjarrell

Claims 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kozak in view of Briggs and Stone as applied to claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 15-17, and 20, and further in view of Fitzjarrell.⁷

Claims 21 and 22 require that the sole active anti-acne ingredient is salicylic acid. Fitzjarrell describes a prior art topical cream containing salicylic acid. Fitzjarrell, column 1, lines 27-28. Appellant argues that Fitzjarrell teaches away from the claimed subject matter because it is "often unsuccessful and may have significant side effects." Brief, page 24.

Even assuming that Appellant is correct that the success rate of salicylic acid in treating acne is not 100% and problem-free, we do not see this as a "teaching away." Each of Kozak, Briggs, Lin, and Fitzjarrell, in fact, teach that salicylic acid is utilized to treat acne. Fitzjarrell names it as the active ingredient in a topical cream. Fitzjarrell, column 1, lines 27-28. "A reference teaches away only when a person of ordinary skill, upon examining the reference, would be discouraged from following the path set out in the reference, or would be led in a direction different from the path that was taken by the applicant. In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994). The prior art of record clearly shows that salicylic acid was widely used as an acne treatment. See, e.g.,

Specification, pages 1-2; Lin, column 1, lines 55-65; Briggs, column 1, line 65-column 2, line 1. Using it as the “sole” active ingredient would be practicing a conventional acne treatment, sans the “improvements” also described in the prior art. This does not require the skilled worker to take a new path or different direction, but just to continue on the same worn path. We affirm the rejection of claims 21 and 22.

Sciarra

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Kozak in view of Briggs and Stone as applied to claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 15-17, and 20, and further in view of Sciarra.⁸

Claim 19 recites that the dispenser “dispenses about 50 to 500 microliters of the solution per actuation.” Stone is silent as to how much volume is dispensed when the pump sprayer is operated. However, the Examiner asserts that the claimed limitation is disclosed in Sciarra, a reference which describes the delivery of active agents in aerosol dosage form. Answer, page 8.

Sciarra is a review of aerosol dosages forms for the delivery of therapeutically active agents. Appellant does not challenge its relevance as analogous art to the claimed subject matter nor the Examiner’s finding that aerosol delivery systems can be modified to produce 50 to 500 microliters of solution per actuation. Instead, they argue that “Sciarra merely teaches the general use of aerosol devices for administering cosmetics and pharmaceuticals.” Brief, page 26. We do not find this fatal to the rejection. As pointed out by the Examiner, Sciarra describes delivery of acne

⁷ Fitzjarrell, U.S. Pat. No. 5,759,559, issued Jun. 2, 1998

⁸ Sciarra, Chapter 95, Aerosols, page 1676-1692, in Remington: Practice of the Science and Pharmacy, Mack Publishing Co., 1995.

treatments in aerosol dosage forms. Sciarra, page 1676, column 1, paragraph 1. Dosage volumes of 25 to 150 microliters are also disclosed. Id., page 1676, column 1, first full paragraph; page 1689, first column, line 2. “The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). (Internal citations removed.) When the teachings of the combined references are considered in their entirety, it is our view that the skilled worker would have recognized that the prior art suggested dispensers capable of delivering fine mist pump sprays having the claimed volume.

Summary

The rejection of claims 1, 2, 4, 5, 7-11, 13, and 15-22 over prior art is affirmed.

No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a).

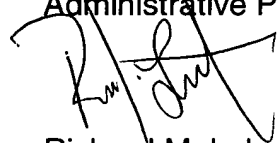
AFFIRMED



Demetra J. Mills
Administrative Patent Judge



Nancy J. Linck
Administrative Patent Judge



Richard M. Lebovitz
Administrative Patent Judge

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Notice of References Cited	Application/Control No. 09/557,187	Applicant(s)/Patent Under Reexamination 2006-2477	
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
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NON-PATENT DOCUMENTS

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	U	The Random House College Dictionary, Random House, Inc., 1975, Page 15 The Random House College Dictionary, Random House, Inc., 1975 Page 929
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 j joke ŋ sing ō flow ɔ flaw ɔi coin th thin th this
 jū loot ū foot v vet vū few vū furious zh vision

len(t)s \n [ME, fr. MF, fr. L *ens*] 1 a *often cap*: divine received as the power sustaining the quality or state of being

L *provident*, *providens*, fr. prp. n for the future: PRUDENT 2 *adv*

adj 1 *archaic*: marked by providence, or determined by Providence 2 an intervention of Providence see LUCKY — *prov-i-den-ti-ally*

that provides; esp.: one that

on condition that: in case *provincia* 1 a: a country or the ancient Roman government of a country *c pl*: all of 2 a: a division of a country *b*: a bishop or metropolitan *c*: a 3 a: a biogeographic division in area that exhibits essential *also*: one characterized by all features 4 a: proper or SPHERE *b*: a department of ACTION

the superior of a province of a: one living in or coming from *or* restricted interests or outlook or refinement

or coming from a province 2 *b*: lacking the polish of urban *or* relating to a decorative style, informality, and relative *h(-ə)-lē* *adv*

1: a dialectal or local word, *or* state of being provincial *or*: a native or inhabitant of a

en, *pl*-ties 1: PROVINCIAL-ism 2: *adj*: *izing*: to make provincial *or* relating to a decorative style

signed for or used in scientific place where something new is

a noninfectious intracellular host cell like a plasmagene —

fr. MF, fr. LL & L; LL fr. L, foresight, fr. *provisus*, pp. he act or process of providing prepared beforehand *c*: a RATION *clack* of proper *c*: for 2: a stock of needed material: VICTUALS — usu. used in pl.

-sion-ing \-vīzh(-ə)-nīg\ : to

adj: serving for the time *ally* *-ē* *adv* for use until a regular issue

adj: PROVISIONAL, furnish of provisions *or* -soes [ME, fr. ML *provisio* *or* clause (as in a contract) that stipulation: PROVISION containing or subject to a ONAL

a precursor of a vitamin *rganism* *or* [ME *provocacioun*, fr. MF *provocatio*, fr. *provocatus*, pp. of INCITEMENT 2: something

serving or tending to provoke, *n* — *pro-voc-a-tive-ly* *adv* —

pro-vok-ing [ME *provoken*, fr. *pro-forth* + *vocare* to call — AROUSE, STIR *b*: to incite to *th*: EVOKE *b*: to stir up the needed stimulus for PIQUE, QUICKEN *shared meaning* or feeling or to produce by so

g mild anger: ANNOYING —

g. of *provola*, a kind of cheese] *gn* that is made from curd that d into various shapes, hung in

vast, esp. attrib. *prō(-)vō* *n* fr. ML *propositus*, alter. of *ector*, fr. pp. of *proponere* to *ITION* 1: the chief dignitary 2: the chief magistrate of a a prison 4: a high-ranking

provost court *n*: a military court usu. for the trial of minor offenses within an occupied hostile territory

provost guard *n*: a police detail of soldiers under the authority of the provost marshal

provost marshal *n*: an officer who supervises the military police of a command

pro-w \-prə\ *adj* [ME, fr. MF *prou* — more at PROUD] *archaic*: VALIANT, GALLANT

pro-w \-prə\ *archaic* *prō* *n* [MF *proue*, prob. fr. Old dial. *prua*, fr. L *prora*, fr. Gk *prōra*] 1: the bow of a ship: STEM 2: a pointed projecting front part (as of an airplane)

pro-w-ess \-prə-əs *also* \-prō-əs\ *n* [ME *proesse*, fr. OF *proesse*, fr. *pro* *valiant* — more at PROUD] 1: distinguished bravery; esp.: military valor and skill 2: extraordinary ability *<his ~ on the football field>* *syn* see HEROISM

pro-w \-prə\ *vb* [ME *prollen*] *vi*: to move about or wander stealthily *<submarines were ~ing along our coast>* — Owen Wister *~ vi*: to roam over in a predatory manner *<they ~ed the premises>* — Cedric Adams — *pro-w* \-prə-*lar* *n*

pro-w *n*: an act or instance of prowling — on the *prowl*: in search of something; *specif*: in search of a sexual partner *<his fourth wife had just left him, and he was on the prow* again — Mary McCarthy

prowl car *n*: SQUAD CAR

prox *abbr* proximo

prox-e-mics \-prāk-*se*-miks\ *n pl* *but sing* or *pl* in *constr* [proximity + *-emics* (as in *phonemics*)] a branch of study dealing with the personal and cultural spatial needs of man and his interaction with his environment *space* — *prox-e-mic* \-mik\ *adj*

prox-i-mal \-prāk-sə-məl\ *adj* [L *proximus*] 1: situated close to: NEAREST, PROXIMATE 2: next to or nearest the point of attachment or origin, a central point, or the point of view; esp.: located toward the center of the body — compare DISTAL — *prox-i-mal-ly* \-mə-lē\ *adv*

proximal convoluted tubule *n*: the convoluted portion of the vertebrate nephron that lies between Bowman's capsule and the loop of Henle, is made up of a single layer of cuboidal cells with striated borders, and is held to be concerned esp. with resorption of sugar, sodium and chloride ions, and water from the glomerular filtrate — called also *proximal tubule*

prox-i-mate \-prāk-sə-mət\ *adj* [L *proximatus*, pp. of *proximare* to approach, fr. *proximus* nearest, next, superl. of *prope* near — more at APPROACH] 1 a: very near: CLOSE *b*: soon forthcoming: IMMINENT 2: next preceding or following *<an interest in ~, rather than ultimate, goals>* — Reinhold Niebuhr — *prox-i-mate-ly* *adv* — *prox-i-mate-ness* *n*

prox-i-mi-ty \-prāk-sə-mi-tē\ *n* [MF *proximité*, fr. L *proximitas*, *proximitas*, fr. *proximus*] the quality or state of being proximate *proximity fuzer* *n*: an electronic device that detonates a projectile within effective range of the target by means of the radio waves sent out from a tiny radio set in the nose of the projectile and reflected back to the set from the target

prox-i-mo \-prāk-sə-mō\ *adj* [L *proximo mense* in the next month] of or occurring in the next month after the present

prox-y \-prāk-sē\ *n pl* *proxies* [ME *procurie*, contr. of *procuracie*, fr. AF, fr. ML *procuratio*, alter. of L *procuratio* procurator] 1: the agency, function, or office of a deputy who acts as a substitute for another 2 a: authority or power to act for another *b*: a document giving such authority; *specif*: a power of attorney authorizing a specified person to vote corporate stock 3: a person authorized to act for another: PROCURATOR — *prox-y* *adj*

proxy marriage *n*: a marriage celebrated in the absence of one of the contracting parties who authorizes a proxy to represent him at the ceremony

prude \-prūd\ *n* [F, good woman, prudish woman, short for *prudefemme* good woman, fr. OF *prude femme*] a person who is excessively or priggishly attentive to propriety or decorum; esp.: a woman who shows or affects extreme modesty

pru-dence \-prūd-*n*(t)s\ *n* 1: the ability to govern and discipline oneself by the use of reason 2: sagacity or shrewdness in the management of affairs 3: skill and good judgment in the use of resources 4: caution or circumspection as to danger or risk

pru-dent \-nt\ *adj* [ME, fr. MF, fr. L *prudens*, *prudens*, contr. of *providens*, *providens* — more at PROVIDENT] characterized by, arising from, or showing prudence: as *a*: marked by wisdom or judiciousness *b*: shrewd in the management of practical affairs *c*: marked by circumspection: DISCREET *d*: PROVIDENT, FRUGAL *syn* see WISE — *pru-dent-ly* *adv*

pru-den-tial \-prū-dēn-chəl\ *adj* 1: of, relating to, or proceeding from prudence 2: exercising prudence esp. in business matters — *pru-den-tial-ly* \-dēnch(-ə)-lē\ *adv*

pru-der-y \-prūd(-ə)-rē\ *n pl* *-eries* 1: the characteristic quality or state of a prude 2: a prudish act or remark

pru-dish \-prūd-*ish*\ *adj*: marked by prudery: PRIGGISH — *pru-dish-ly* *adv* — *pru-dish-ness* *n*

pru-i-nose \-prū-ə-nōs\ *adj* [L *pruinus* covered with hoarfrost, fr. *pruina* hoarfrost] covered with whitish dust or bloom *<~ stems>*

prune \-prūn\ *n* [ME, fr. MF, plum, fr. L *prunum* — more at PLUM] a plum dried or capable of drying without fermentation

prune *vb* *pruned*; *pruning* [ME *prouynen*, fr. MF *proignier*, prob. alter. of *proignier* to layer, fr. *provain* layer, fr. L *propagare*, *propago*, fr. *pro* forward + *pangere* to fix — more at PRO-PACT] *vt* 1: to cut off or cut back parts of for better shape or more fruitful growth 2 a: to reduce by eliminating superfluous matter *<pruned the text>* *b*: to remove as superfluous *<~ away all ornamentation>* *c*: to effect a reduction in *<~ the budget>* *~ vi*: to cut away what is unwanted — *prun-er* *n*

pru-nel-la \-prū-nel-ə\ *also* *pru-nelle* \-nel\ *n* [F *prunelle*, lit., sloe, fr. dim. of *prune* plum] 1: a twilled woolen dress fabric 2: a heavy woolen fabric used for the uppers of shoes

pruning hook *n*: a pole bearing a curved blade for pruning plants

pru-ri-ence \-prūr-ē-*ən*(t)s\ *n*: the quality or state of being prurient

pru-ri-en-cy \-ən-sē\ *n*: PRURIENCE

pru-ri-ent \-*ən*(t)\ *adj* [L *prurient*, *pruriens*, prp. of *prurire* to itch, crave, be wanton; akin to L *pruna* glowing coal, Skt *prayati* he sings] 1: marked by restless craving 2 a: having lascivious thoughts or desires: LEWD *b*: arousing such thoughts or desires — *pru-ri-ent-ly* *adv*

pru-rig-i-nous \-prū-rī-j-ə-nəs\ *adj* [L *pruriginosus* having the itch, fr. *prurigin*, *prurigo*] resembling, caused by, affected with, or being prurigo

pru-ri-go \-prū-rī(-)gō, -rē-\ *n* [NL, fr. L, itch, fr. *prurire*] a chronic inflammatory skin disease marked by itching papules

pru-rit-ic \-rit-ik\ *adj*: of, relating to, or marked by itching

pru-ri-tus \-rit-əs, -rēt-\ *n* [L, fr. *pruritus*, pp. of *prurire*] ITCH

Prus-sian blue \-prəsh-ən-\ *n* [Prussia, Germany] 1: any of numerous blue iron pigments formerly regarded as ferric ferrocyanide 2: a dark blue crystalline hydrated ferric ferrocyanide $Fe_4[Fe(CN)_6]_3 \cdot xH_2O$ used as a test for ferric iron 3: a variable color averaging a moderate to strong greenish blue

Prus-sian-ism \-prəsh-ə-nīz-əm\ *n*: the practices or policies (as the advocacy of militarism) held to be typically Prussian

prus-sian-ize \-nīz-*vi* -ized; -izing *often cap*: to make Prussian in character or principle (as in authoritarian control or rigid discipline) — *prus-sian-iza-tion* \-prəsh-ə-nā-zā-shən\ *n*

pru-si-ate \-prəs-ē-āt\ *n* [F, fr. (*acide*) *prussique*] 1: a salt of hydrocyanic acid: CYANIDE 2 a: FERROCYNIDE *b*: FERRICYANIDE

pru-tah or *pru-ta* \-prū-tā\ *n pl* *pru-toth* or *pru-tot* \-tōt(h), -tōs\ [NHeb *pēritāh*, fr. LHeb, a small coin] 1: a monetary unit of Israel equivalent to 1/1000 pound 2: a coin representing one prutah

pry \-prī\ *vi* *pried*; *prying* [ME *prien*] to look closely or inquisitively; esp.: to make a nosy or presumptuous inquiry

pry *vt* *pried*; *prying* [alter. of *prize*] 1: to raise, move, or pull apart with a pry or lever: PRIZE 2: to extract, detach, or open with difficulty *<pried the secret out of his sister>*

pry *n*: a tool for prying 2: LEVERAGE

pry-er *var* of *PRIER*

pry-ing *adj*: impertinently or officiously inquisitive or interrogatory *syn* see CURIOUS — *pry-ing-ly* \-ī-jē-lē\ *adv*

Ps or *Psa* *abbr* Psalms

PS *abbr* 1 [L *postscriptum*] postscript 2 power supply 3 public school

psalm \-sām, -sālm\ *n*, *often cap* [ME, fr. OE *psalm*, fr. LL *psalmus*, fr. Gk *psalmos*, lit., twanging of a harp, fr. *psallein* to pluck, play a stringed instrument] a sacred song or poem used in worship; esp.: one of the biblical hymns collected in the Book of Psalms

psalm-book \-būk\ *n*, *archaic*: PSALTER

psalm-ist \-sām-*ist*, -sāl-mast\ *n*: a writer or composer of esp. biblical psalms

psalm-ody \-sām-*əd*-ē, -sāl-mōd-\ *n* [ME *psalmodie*, fr. LL *psalmodia*, fr. LGk *psalmodia*, lit., twanging of a harp, fr. *psalmos* + *aidēin* to sing — more at ODE] 1: the act, practice, or art of singing psalms in worship 2: a collection of psalms

Psalms \-sālmz, -sālmz\ *n pl* *but sing* in *constr*: a collection of sacred poems forming a book of canonical Jewish and Christian Scripture — see BIBLE table

Psal-ter \-sōl-tər\ *n* [ME, fr. OE *psalter* & OF *psalter*, fr. LL *psalterium*, fr. LGk *psalterion*, fr. Gk, psaltery] the Book of Psalms; *also*: a collection of Psalms for liturgical or devotional use

psal-te-ri-um \-sōl-tīr-ē-əm\ *n pl* *-ria* \-ē-ə\ [NL, fr. LL, psalter; fr. the resemblance of the folds of the pages of a book]: OMASUM *psal-tery* *also* *psal-try* \-sōl-t(ə)-rē\ *n pl* *-ter-ies* *also* *-tries* [ME *psalterie*, fr. MF, fr. L *psalterion*, fr. Gk *psalterion*, fr. *psallein* to play on a stringed instrument] an ancient musical instrument resembling the zither

p's and *q's* \-pēz-*n* -kyūz\ *n pl* [fr. the phrase *mind one's p's and q's*, alluding to the difficulty a child learning to write has in distinguishing between *p* and *q*] 1: something (as one's manners) that one should be mindful of *<better watch his p's and q's when I get a six-gun of my own>* — Jean Stafford 2: best behavior *<being on her p's and q's for two solid days was too much>* — Guy McCrone

PSAT *abbr* Preliminary Scholastic Aptitude Test

psec *abbr* picosecond

pse-phol-o-gy \-sē-fāl-ə-jē\ *n* [Gk *psēphos* pebble, ballot, vote; fr. the use of pebbles by the ancient Greeks in voting] the scientific study of elections — *pse-pho-log-i-cal* \-sē-fā-fāj-i-kəl\ *adj* — *pse-phol-o-gist* \-sē-fāl-ə-jast\ *n*

pseud *abbr* pseudonym; pseudonymous

pseud- or *pseudo-* *comb form* [ME, fr. LL, fr. Gk, fr. *pseudēs*] false: *spurious* *<pseudaxis>* *<pseudoclassic>* *<pseudopodium>*

pseud-epi-graph \-sū-dep-ə-graf\ *n*: PSEUDEPIGRAPHON 2

pseud-epig-ra-phon \-sūd-ē-pīg-rā-fān\ *n pl* *-pha* \-fə\ [NL, sing. of *pseudepigrapha*, fr. Gk, neut. pl. of *pseudepigraphos* falsely inscribed, fr. *pseud-* + *epigraphē* to inscribe — more at EPIGRAM] 1 *pl*: APOCRYPHA 2: any of various pseudonymous or anonymous Jewish religious writings of the period 200 a.c. to 200 A.D.; esp.: one of such writings (as the Psalms of Solomon) not included in any canon of biblical Scripture — usu. used in pl.

pseud-epig-ra-phy \-fē\ *n* [Gk *pseudepigraphos*] the ascription of false names of authors to works

pseu-do \-sūd(-)ō\ *adj* [ME, fr. *pseudo-*] being apparently rather than actually as stated: SHAM, SPURIOUS *<distinction between true and ~ humanism>* — K. F. Reinhardt

abut *^* kitten *or* further *a* back *ā* bake *ā* cot, cart

au out *ch* chin *e* less *ē* easy *g* gift *i* trip *i* life

j joke *q* sing *ō* flow *ō* flaw *oi* coin *th* thin *th* this

ü loot *ü* foot *y* yet *yü* few *yü* furious *zh* vision